

SECTION 092900 – USG DUROCK BRAND GLASSMAT TILE BACKERBOARD

Product Summary:

- USG Durock™ Glass-Mat Tile Backerboard consists of a treated water-resistant gypsum core that is covered with a coated fiberglass mat facer and back and has a proprietary surface.
- The panel is an ideal tile substrate for wet areas Res1, Res2, Res3, Com1, Com2 and Com3 as defined by the Tile Council of North America Handbook 2014.
- Lightweight and easy to score, snap and fasten
- Moisture- and mold-resistant substrate
- Scores the highest achievable rating (10 out of 10) for mold resistance per ASTM D3273
- Proprietary coating provides exceptional tile bond performance
- USG Durock™ Brand Glass-Mat Tile Backerboard is a moisture- and mold-resistant gypsum panel with a fiberglass mat facer and back.
- USG Durock™ Glass-Mat Tile Backerboard combines the tile bond of cement board with the handling and ease of use of a USG Sheetrock® Brand panel.
- The 5/8" Type X panels are UL classified as fire resistant.
- Call <insert product representative here> or 800.874.4968 for technical questions.

Note to Specifier:

- This document is not intended to function as a standalone specification. It is intended to assist the specifier in inserting the proper language into the following recommended specification sections:
- Consult Glass Mat Tile Backerboard literature DB691 for more information at USG.com.
- 09 29 00 Gypsum Board
- 09 30 13 Ceramic Tiling
- 09 30 23 Glass Tiling
- 09 30 33 Stone Tiling

2.5 GLASS-MAT BACKERBOARD

B. Glass-Mat Backerboard <INSERT PANEL DESIGNATION HERE>:

1. Basis of Design: Subject to compliance with project requirements, the design is based on the following: USG Corporation, LLC, "USG DUROCK BRAND GLASSMAT TILE BACKERBOARD".
2. Classification: ASTM C1178, Standard Specification for Coated Glass Mat Water-Resistant Gypsum Backing Panel. USG Durock™ Glass-Mat Tile Backerboard exceeds ASTM C1178, which is the standard specification for coated glass-mat water-resistant gypsum backing panels. provide with manufacturer's standard edges.
 - a. Thickness: [1/2 inch (12.7 mm)] [5/8 inch (15.9 mm)] [As indicated].
 - b. Board Length: 8 feet (2438 mm).
 - c. Board Width: 48 inches (1219 mm).
 - d. Mold Resistance: ASTM D 3273, score of 10.
3. Fastener Requirements: Provide fasteners of size and type indicated that comply with requirements specified in this Article for material and application.
 - a. Screws for Fastening Gypsum Sheathing to Cold-Formed Metal Framing: DUROCK Tile Backer Screws [1-1/4 inch] [1-5/8 inch] [2-1/4 inch].
 - b. Wood Screws: DUROCK Tile Backer Screws for wood framing [1-1/4 inch] [1-5/8 inch] [2-1/4 inch].
 - c. Nails: 11-gauge hot-dipped galvanized roofing nails [1-1/2 inch (38 mm)] [1-3/4 inch (44 mm)], 7/16 11 mm inch diameter head.
4. Panel Installation Requirements:

- a. Install backerboard with ends and edges closely abutted but not forced together. Stagger end joints in successive courses.
 - b. For flooring applications over a wood-based substrate, laminate USG Durock™ Glass-Mat Tile Backerboard to subfloor using Type 1 organic adhesive or latex-modified thin-set mortar suitable for bonding cement board. Fasten to subfloor with 1-1/4" USG Durock™ Brand Tile Backer Screws for wood framing (or equivalent) or 1-1/2" hot-dipped galvanized roofing nails spaced 8" o.c. in both directions with perimeter fasteners at least 3/8" and less than 5/8" from ends and edges. Drive nails and screws so bottoms of heads are flush with panel surface to ensure firm panel contact with subfloor. Do not overdrive fasteners. Prefill joints with tilesetting mortar or adhesive and then immediately embed USG Durock™ Brand Tile Backer Tape and level joints.
 - c. For wall application, fasten USG Durock™ Glass-Mat Tile Backerboard to framing with specified fasteners. Drive fasteners into field of panels first, working toward ends and edges. Hold panels in firm contact with framing while driving fasteners. Space fasteners maximum 8" o.c. for walls, 6" o.c. for ceilings, with perimeter fasteners at least 3/8" and less than 5/8" from ends and edges. Drive nails and screws so bottoms of heads are flush with panel surface. Do not overdrive fasteners. Approved fasteners include: USG Durock™ Tile Backer Screws for steel framing (or equivalent), 1-1/4" and 1-5/8" for 14- to 20-gauge steel framing; USG Durock™ Tile Backer Screws for wood framing (or equivalent), 1-1/4", 1-5/8" and 2-1/4" for wood framing; and nails (1-1/2" hot-dipped galvanized roofing nails). Prefill joints and then immediately embed USG Durock™ Tile Backer Tape and level joints. Maintain 1/4" gap between USG Durock™ Glass-Mat Tile Backerboard and tub surround.
 - d. Panels should be cut to size with a knife and straight edge. A power saw should be used only if it is equipped with a dust-collection device. Installer should wear NIOSH/MSHA-approved dust mask.
 - e. If waterproofing is required, treat joints and fastener penetrations with USG Durock™ Brand Waterproofing Membrane or equivalent ANSI A118.10 waterproofing membrane. Refer to the current USG Durock™ Brand Waterproofing Membrane submittal sheet (CB595) or waterproofing membrane manufacturer's installation recommendations. For technical assistance, call USG Technical Service at 800 874-4968.
 - f. In areas where standing water could occur on horizontal surfaces, such as shower benches or niches, waterproofing is required with USG Durock™ Waterproofing Membrane or equivalent ANSI A118.10 waterproofing membrane. Refer to the current USG Durock™ Brand Waterproofing Membrane submittal sheet (CB595) or waterproofing membrane manufacturer's installation recommendations.
5. Application Limitations:
- a. Tile must be applied on the gray-coated side of panel. Panels are designed for interior use only and should not be used around fireplaces or areas where prolonged exposure to heat exceeds 125°F (52°C) or for exterior applications. Use framing or furring when applying over concrete or masonry block. Install vapor retarders suitable for bonding tiles on the face of the panels.
 - b. For wall applications, maximum stud spacing: 16" o.c. (24" o.c. for cavity shaft wall assembly). Framing shall be designed (based on stud properties alone) not to exceed L/360 deflection for tile and thin brick. Maximum fastener spacing: 8" o.c. for wood and steel framing; 6" o.c. for ceiling applications.
 - c. Floor applications, maximum joist spacing 24" o.c. The subfloor system should be designed with a maximum deflection limit of L/360 for the span. Some finish

materials may require a more rigid subassembly (such as large format tile and natural stone products). In these cases, follow the manufacturer's minimum requirements. The subfloor shall be APA Span-Rated Plywood or OSB with an Exposure 1 classification or better with tongue and groove or back blocked at the unsupported edges.

- d. Ceiling maximum dead load 7.5 psf.
- e. Steel framing must be 20-gauge equivalent or heavier.
- f. Consult manufacturers information on finishing limitations.
 - 1) Do not use drywall screws or drywall nails.
 - 2) Do not use drywall joint tape.
 - 3) Do not use with vinyl flooring or over a concrete subfloor.
- g. USG Durock™ Glass-Mat Tile Backerboard is not designed for use as a structural panel.
- h. Panels should not be used in select wet areas including commercial saunas or steam rooms, gang showers, or shower pan bases.
- i. Waterproofing membrane must be used over USG Durock™ Glass-Mat Tile Backerboard in select wet areas including indoor hot tub decks, shower benches and niches, tiled wall and ceiling applications in indoor pool areas, and tiled wall and ceiling applications in residential steam rooms, per ANSI A118.10.

END OF SECTION

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